

ventricle. The anterior artery: the anterior wall of the left ventricle and ½ anterior of the septum. In the right ventricle the veins open. The left ventricle: at the level of the right and left semilunar valves is the origin of the coronary arteries. The veins are organized in a superficial and a deep system. The heart is innervated by parasympathetic and sympathetic fibers. The lymphatic drainage is assured by 3 plexus in the thraceobronchial and mediastinal lymph. It is important to understand the heart rapport with the spinal column, the ribs and back muscles. For the left ventricle, is projected at the T8-T9 level, the right auricle is projected at the second rib cartilage, the left one at the level of the third rib cartilage.

**Conclusion:** It is important to know the vascularization and innervation of the heart at clinical level and at surgical level. In cases of disorders of this system we can detect pathologies.

**Keywords:** Cord, vessels, nerves, column spine, back muscles

## 9. THE RELATIONSHIP BETWEEN RENAL VASCULATURE AND SURFACE ANATOMY

**Covașev Serghei**

*Academic adviser:* **Belic Olga**, M.D., Ph. D., Associate Professor, State Medical and Pharmaceutical University «Nicolae Testemițanu», Chișinău, Republic of Moldova

**Introduction:** Kidney anatomy variations and malformation present an important field of study for fundamental as well as clinical sciences. The renal parenchyma along with its vascular supply has a tight embryological and developmental relationship. Renal fetal lobulation is considered as a rare variation of development. But the frequency of this anomaly is higher and can be associated with vascular variations. The presence of vascular variations can cause alteration in kidney circulation resulting in lobulated appearance of the kidney.

**Purpose and Objectives:** The purpose of the study is to show that fetal lobulation is a more frequent structural variation and is usually associated with vascular developmental changes.

**Material and Methods:** The study was performed using macroscopic dissection of 48 kidneys along with their vessels. The acquired data were analyzed using Statistical Package for the Social Sciences.

**Results:** Renal vascular anomalies are quite frequent but they are rarely accompanied by changes in the organ. The frequency of fetal lobulation is 0,5-1% in the current data. Our results indicate that this normally can be encountered much more often. Out of the 48 kidneys 13 had some degree of fetal lobulation on their surface representing 27.09% of cases. From 13 kidneys bilateral fetal lobulation was identified in 8 (61.5%), 5 kidneys had unilateral lobulation (38.5%). 9 kidneys (69.23%) had variations in the development of blood vessels, from which 6 specimens had a superior polar artery, 1 specimen - presegmental branching of the renal artery, 2 specimens had two renal arteries.

**Conclusion:** Fetal lobulation is a more frequent variation of development than it is usually described in the literature. Our data indicates that quite often (69.23%) fetal lobulation is accompanied by some degree of vascular variation of development which can be polar or additional arteries as well as presegmented branching of the renal artery. This knowledge can be useful in different diagnostic procedures in order to determine the possibility of vascular anomalies as well as other changes in the excretory system.

**Keywords:** Renal morphology, renal vasculature, renal fetal lobulation

## 10. STEM CELLS FROM THE AMNIOTIC FLUID , CHARACTERISTICS OF PROLIFERATION AND DIFFERENTIATION.

**Crețu-Babanuță Natalia**

*Academic adviser:* **Nacu Viorel**, M.D Ph.D., Professor, State Medical and Pharmaceutical University „Nicolae Testemițanu”, Chișinău, Republic of Moldova

**Introduction:** Regenerative medicine has as a basis the study of stem cells and is one of the newest branches of contemporary medicine. It revolutionizes and lengthens life expectancy but directly and point out the quality. Stem cells are non-differentiated cells or non-specialised and have